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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

07/21/2004

Corporate Patent Counsel U.S. Philips Corporation 580 White Plains Road Tarrytown, NY 10591 EXAMINER
TON, MY TRANG

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PAPER NUMBER

ART UNIT

DATE MAILED: 07/21/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,428	09/08/2003	Rachid Waffaoui El	NL020829	9050

TITLE OF INVENTION: LIMITING AMPLIFIER AND METHOD FOR AMPLIFYING AN INPUT SIGNAL

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	10/21/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail

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(703) 746-4000 or Fax INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) have its own certificate of mailing or transmission. 07/21/2004 7590 Certificate of Mailing or Transmission Corporate Patent Counsel I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below. U.S. Philips Corporation 580 White Plains Road Tarrytown, NY 10591 (Signature) (Date CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE NL020829 9050 Rachid Waffaoui El 10/657.428 09/08/2003 TITLE OF INVENTION: LIMITING AMPLIFIER AND METHOD FOR AMPLIFYING AN INPUT SIGNAL PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE ISSUE FEE APPLN, TYPE SMALL ENTITY \$300 \$1630 10/21/2004 \$1330 NO nonprovisional CLASS-SUBCLAS S **EXAMINER** ART UNIT 327-306000 2816 TON, MY TRANG 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is The Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE ☐ government Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual a corporation or other private group entity 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee (No small entity discount permitted) ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_(enclose an extra copy of this form). ☐ Advance Order - # of Copies Deposit Account Number 5. Change in Entity Status (from status indicated above) □ b. Applicant is not claiming SMALL ENTITY status. See, e.g., 37 CFR 1.27(g)(2). a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. (Authorized Signature) (Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE NL020829 09/08/2003 Rachid Waffaoui El 9050 10/657,428 EXAMINER 07/21/2004 Corporate Patent Counsel TON, MY TRANG U.S. Philips Corporation ART UNIT PAPER NUMBER 580 White Plains Road Tarrytown, NY 10591 **DATE MAILED: 07/21/2004** 

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
	10/657,428	WAFFAOUI EL, RA	CHID
Notice of Allowability	Examiner	Art Unit	
	My-Trang N. Ton	2816	
The MAILING DATE of this communication apperation apperation all claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. <b>THIS</b>
1. This communication is responsive to <u>Tel. Int. 07/2/04.</u>			
2. ☑ The allowed claim(s) is/are <u>1-12</u> .			
3. The drawings filed on are accepted by the Examine	r.		
4. ☑ Acknowledgment is made of a claim for foreign priority una) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☒ including changes required by the attached Examiner's Paper No./Mail Date 07/12/04.  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in to T. ☐ DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	e been received. e been received in Application No cuments have been received in this is of this communication to file a reply MENT of this application.  iitted. Note the attached EXAMINER es reason(s) why the oath or declara st be submitted. son's Patent Drawing Review ( PTO s Amendment / Comment or in the Co	national stage application of the front (not the first but the front (not the first but the first bu	quirements NOTICE OF
<ul> <li>Attachment(s)</li> <li>1.  Notice of References Cited (PTO-892)</li> <li>2.  Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3.  Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date 07/12/04</li> <li>4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	5. ☐ Notice of Informal P 6. ☑ Interview Summary Paper No./Mail Dat 08), 7. ☐ Examiner's Amendr 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), te <u>07/12/04</u> . ment/Comment	owance

Application/Control Number: 10/657,428

Art Unit: 2816

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Att. Waxler on 07/12/04.

The abstract has been amended as follow:

### In the abstract

Disclosed is a limiting amplifier for amplifying an input signal including at least first portions having a first amplitude and second portions having a second amplitude being lower than said first amplitude. The amplifier includes a first peak detector for detecting the current maximum value in the input signal. The amplifier also includes a second peak detector for detecting the current minimum value in the input signal. The amplifier also includes determining means for providing a first decision that a variation in the input signal is due to a variation in a first amplitude and/or a second amplitude, or a second decision that a variation in the input signal is due to a transition from a first portion to a second portion, a third decision that a variation in the input signal is due to a transition from a second portion to a first portion, and controlling meats for either activating or inactivating one of the decreasing means and the increasing means based on the decision.

Application/Control Number: 10/657,428

Art Unit: 2816

## In the drawings

The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Figs. 1-4 have been labeled as the "Prior Art". In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

## Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The present invention is drawn to a limiting amplifier utilizing a first peak detecting means, a second peak detecting means, determining means, and controlling means recited in claims 1-12. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: the combination of all the details for "the first peak detecting means", the details for "the second peak detecting means", "determining means" and "the controlling means" as recited in claim 1; the combination of all the method steps as recited in claim 9.

The prior art references submitted by the applicant on IDS form received on 09/08/03 was reviewed and considered. These references appear to be the best references with respect to the claimed invention and closely matched most of the references found during the examiner's searches. However, as noted above, the combination of all the details for "the first peak detecting means", the details for "the second peak detecting means", "determining means" and "the controlling means" (claim 1); the combination of all the method steps as recited in claim 9 is not disclosed. Therefore, the claims are patentably distinct over all these prior art references of record.

Application/Control Number: 10/657,428

Art Unit: 2816

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER

July 12, 2004

# Notice of References Cited Application/Control No. 10/657,428 Examiner My-Trang N. Ton Applicant(s)/Patent Under Reexamination WAFFAOUI EL, RACHID Art Unit Page 1 of 1

#### **U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6,657,488	12-2003	King et al.	330/9
	В	US-6,304,357	10-2001	Ohhata et al.	398/209
	C	US-6,292,058	09-2001	Ide et al.	330/279
	ם	US-6,275,541	08-2001	Nagahori et al.	375/318
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#### FOREIGN PATENT DOCUMENTS

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#### **NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

	Application No.	Applicant(s)	
Interview Summary	10/657,428	WAFFAOUI E	EL, RACHID
interview duminary	Examiner	Art Unit	
	My-Trang N. Ton	2816	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>Exr Ton</u> .	(3)		
(2) Att. Waxler.	(4)		
Date of Interview: 12 July 2004.			
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant	2)∐ applicant's represe	entative]	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Claim(s) discussed: <u>n/a</u> .			
Identification of prior art discussed: <u>n/a</u> .			
Agreement with respect to the claims f)⊠ was reached. of	)∏ was not reached.	h)□ N/A.	
Substance of Interview including description of the general reached, or any other comments: <u>Agreement was reached</u>	nature of what was agr to label Figs. 1-4 as Pr	reed to if an agreemo ior Art & amdt. the A	ent was <i>bstract</i> .
(A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no dallowable is available, a summary thereof must be attached	opy of the amendments		
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR FORM, WHICHEVER IS LATER, TO FILE A STATEMENT Summary of Record of Interview requirements on reverse second	last Office action has a THE MAILING DATE O OF THE SUBSTANCE	already been filed, A OF THIS INTERVIEV OF THE INTERVIEV	PPLICANT IS V SUMMARY
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														Applicant Rachid WAFFACUI EL										
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